October 18, 2004

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of M. Jaye, K. Doan, J. Krawiec, K. Lynch, D. Amin, V. South, D. Marchadier, C. Maugeais, and D. Rader
Application No. 09/277,401
Filed March 26, 1999

Art Unit 1652
Examiner K. Kerr

Compositions and Methods for Effecting the Levels of High Density Lipoprotein (HDL) Cholesterol and Apolipoprotein AI, Very Low Density Lipoprotein (VLDL) Cholesterol and Low Density Lipoprotein (LDL) Cholesterol

(Atty. Docket No. P 22,944-C USA)

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on Monday, October 18, 2004.

Gene J. Yao

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REPLY UNDER 37 CFR §1.111 TO EXAMINER'S JUNE 18, 2004 ACTION

Sir:

Please amend the above-identified application as follows.

Amendments to the Description

Please amend the paragraph commencing at page 1, line 5, as follows.

--This application is a continuation-in-part of U.S. Application No. 08/985,492, filed December 5, 1997, now U.S. Patent No. 6,395,530, which claims the benefit of provisional applications under 35 U.S.C. § 119(e), 60/032,254 and 60/032,783, both of which were filed December 6, 1996, the disclosures of which are incorporated herein by reference in their entirety.--

Please amend the paragraph commencing at page 21, line 17, as follows.

--Figure 6 shows a protein sequence alignment of the members of the triacylglycerol lipase gene family (SEQ ID Nos: 13-15). Shaded residues are identical to the LLGXL protein (SEQ ID NO: 8). The polynucleotide sequence at the top is the coding portion of the nucleic acid encoding LLGXL protein (nucleotides 0 to 1751 of SEQ ID NO: 7). The deduced amino acid sequence of human LIPG(EL) is provided on the top line and is compared with the other major members of the TG lipase family, LPL, HL and PL. EL residues identical to those in at least one other member of the family are shaded as well as the corresponding residue in the other family member. Amino acids are numbered according to convention beginning with the initial residue of the secreted protein. The predicted sites of signal peptide cleavage are marked with a solid line between amino acid residues. The GXSXG lipase motif containing the active serine is boxed. The amino acids of the catalytic triad are marked with an asterisk. The conserved cysteines are marked with filled circles. Potential N-linked glycosylation sites are marked with arrowheads. The lid region is

indicated by a bold line. Gaps were introduced into the sequences to maximize the alignment values using the CLUSTAL program. - -

Please amend the paragraph commencing at page 23, line 13, as follows.

--Figure 13 shows the sequence of the rabbit LIPG PCR product (RLLG.SEQ, SEQ ID NO: 11) and the sequence alignment between the rabbit LIPG PCR product and the corresponding sequence in the human cDNA (LLG7742A) (nucleotides 1023 to 1247 of SEQ ID NO: 7). Identical nucleotides are shaded.--

Please add the following at the end of page 24.

- - DESCRIPTION OF THE SEQUENCES

SEQ ID NO. 1 is the nucleic acid sequence of the differential display PT-PCR product containing a portion of the cDNA encoding human LIPG polypeptide.

SEQ ID NO. 2 is the deduced amino acid sequence encoded by SEQ ID NO. 1.

SEQ ID NO. 3 is the nucleic acid sequence of the 5' RACE extension of the cDNA fragment of SEQ ID NO. 1.

SEQ ID NO. 4 is the deduced amino acid sequence encoded by SEQ ID NO. 3.

SEQ ID NO. 5 is the nucleic acid sequence of the cDNA encoding human LLGN polypeptide. This cDNA corresponds to an mRNA product formed from transcription of the human LIPG gene.

SEQ ID NO. 6 is the deduced amino acid sequence encoded by SEQ ID NO. 5 (the sequence for human LLGN polypeptide).

SEQ ID NO. 7 is the nucleic acid sequence of the cDNA encoding human LLGXL polypeptide. This cDNA corresponds to an mRNA product formed from transcription of the human LIPG gene.

SEQ ID NO. 8 is the deduced amino acid sequence encoded by SEQ ID NO. 7 (the sequence for human LLGXL polypeptide).

SEQ ID NO. 9 is the nucleic acid sequence encoding SEQ ID NO. 10.

SEQ ID NO. 10 is the amino acid sequence common to both SEQ ID NOS. 6 and 8.

SEQ ID NO. 11 is the nucleic acid encoding the rabbit LIPG PCR product.

SEQ ID NO. 12 is the deduced amino acid sequence encoded by SEQ ID NO. 11.

SEQ ID NO. 13 is the amino acid sequence for human lipoprotein lipase (LPL).

SEQ ID NO. 14 is the amino acid sequence for human hepatic lipase (HL).

SEQ ID NO. 15 is the amino acid sequence for human pancreatic lipase (PL).

SEQ ID NO. 16 is the amino acid sequence of an immunizing peptide corresponding to residues 8 to 23 of LLGXL polypeptide.

SEQ ID NO. 17 is the nucleic acid sequence for differential display downstream primer 7.

SEQ ID NO. 18 is the nucleic acid sequence for differential display upstream primer 15.

SEQ ID NO. 19 is the nucleic acid sequence for 5' RACE Primer 2a.

SEQ ID NO. 20 is the nucleic acid sequence for 5' RACE Primer 3a.

SEQ ID NO. 21 is the nucleic acid sequence for 5'RACE Primer 4a.

SEQ ID NO. 22 is the nucleic acid sequence for 5' RACE anchor primer.

SEQ ID NO. 23 is the nucleic acid sequence for the 5' RACE universal amplification primer.

SEQ ID NO. 24 is the nucleic acid sequence for 5' LPL primer.

SEQ ID NO. 25 is the nucleic acid sequence for 3' LPL primer.

SEQ ID NO. 26 is the nucleic acid sequence for primer DLIP774.

SEQ ID NO. 27 is the nucleic acid sequence for primer LLGgen2a.

SEQ ID NO. 28 is the nucleic acid sequence for Hllg-gsp1 primer.

SEQ ID NO. 29 is the nucleic acid sequence for Hllg-gsp2a primer.

SEQ ID NO. 30 is the nucleic acid sequence for G3PDH 5' primer.

SEQ ID NO. 31 is the nucleic acid sequence for G3PDH 3' primer. - -